What is claimed is:

 A radiographic image conversion panel comprising:

a support; and

at least one photostimulable phosphor layer formed on the support by a vapor phase deposition method,

wherein the panel is manufactured according to deposition, a temperature of the support at a time of the deposition being controlled at  $50^{\circ}\text{C}$  to  $150^{\circ}\text{C}$ .

2. The panel of claim 1, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor represented by the following Formula (1),

$$M^1X \cdot aM^2X'_2 \cdot bM^3X''_3 : eA \cdot \cdot \cdot \cdot (1)$$

wherein the M¹ is at least one alkali metal atom selected from the group consisting of Li, Na, K, Rb and Cs; the M² is at least one bivalent metal atom selected from the group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu and Ni; the M³ is at least one tervalent metal atom selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; each of the X, X' and X" is at least one halogen atom selected from the group consisting of F atom, Cl atom, Br atom and I atom; the A is at least one metal atom selected from the group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu and Mg; and each of the a,

b and e represents a numeric value in a range of  $0 \le a < 0.5$ ,  $0 \le b < 0.5$  and  $0 < e \le 0.2$ .

- 3. The panel of claim 1, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor including CsBr.
- 4. The panel of claim 2, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor including CsBr.
- 5. A radiographic image conversion panel comprising:

a support; and

at least one photostimulable phosphor layer formed on the support by a vapor phase deposition method,

wherein the at least one photostimulable phosphor layer is formed through a step of heating one face of the support and cooling the other face of the support when entering vapor flow including photostimulable phosphor raw materials to the support.

6. The panel of claim 5, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor represented by the following Formula (1),

wherein the  $M^1$  is at least one alkali metal atom selected from the group consisting of Li, Na, K, Rb and Cs; the  $M^2$  is at least one bivalent metal atom selected from the group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu and Ni; the  $M^3$  is at least one tervalent metal atom selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; each of the X, X' and X" is at least one halogen atom selected from the group consisting of F atom, Cl atom, Br atom and I atom; the A is at least one metal atom selected from the group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu and Mg; and each of the a, b and e represents a numeric value in a range of  $0 \le a < 0.5$ ,  $0 \le b < 0.5$  and  $0 < e \le 0.2$ .

- 7. The panel of claim 5, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor including CsBr.
- 8. The panel of claim 6, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor including CsBr.
- 9. A method for manufacturing a radiographic image conversion panel having at least one photostimulable phosphor layer formed on a support by a vapor phase

deposition method, comprising:

bending the support by adjusting a curvature radius R of one face of the support so as to be in a range of 1000 mm to 10000 mm;

entering vapor flow including photostimulable phosphor raw material to a convex face formed by bending the support; and

forming the at least one photostimulable phosphor layer on the support.

10. The method of claim 9, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor represented by the following Formula (1),

$$M^1X \cdot aM^2X'_2 \cdot bM^3X''_3 : eA \cdot \cdot \cdot (1)$$

wherein the M¹ is at least one alkali metal atom selected from the group consisting of Li, Na, K, Rb and Cs; the M² is at least one bivalent metal atom selected from the group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu and Ni; the M³ is at least one tervalent metal atom selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; each of the X, X' and X" is at least one halogen atom selected from the group consisting of F atom, Cl atom, Br atom and I atom; the A is at least one metal atom selected from the group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu and Mg; and each of the a,

b and e represents a numeric value in a range of  $0 \le a < 0.5$ ,  $0 \le b < 0.5$  and  $0 < e \le 0.2$ .

- 11. The method of claim 9, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor including CsBr.
- 12. The method of claim 10, wherein the at least one photostimulable phosphor layer contains a photostimulable phosphor including CsBr.